

CLAIMS:

1. Multiphase LC oscillator comprising N units whereby N is at least 2, and each unit performs a phase shift of $180^\circ/N$ of an incoming signal, whereby each unit comprises a VI converter part with a phase shift $180^\circ/N$ and an LC oscillation part, and the multiphase LC oscillator supplies at least two outputs signal with a phase difference.

2. Multiphase LC oscillator as claimed in claim 1, characterized in that each unit comprises control means to adjust the phase shift to obtain the required phase shift of $180^\circ/N$.

Multiphase LC oscillator as claimed in claim 2, characterized in that a VI converter of the unit comprises amplifiers in series with a compensation amplifier parallel.

3. V/I converter for use in a multiphase LC oscillator according to claim 1, characterized in that V/I converter comprises compensation means to compensate for a phase shift.

4. Method to obtain multiphase signals with phase differences $180 \text{ degrees}/N$ whereby N is at least 2, having the steps of receiving an incoming signal, performing a phase shift of $180 \text{ degrees}/N$ and supplying signals with a phase difference.